

In the Claims

1. (Currently amended) A diagnostic composition comprising at least one member selected from the group consisting of:
 - (a) at least one nucleic acid molecule comprising the nucleotide sequence encoding Futrin 1, 2, 3 or 4 (SEQ ID NO. 21, SEQ ID NO: 22, SEQ ID NO. 20, SEQ ID NO: 23, respectively); ~~as depicted in Figure 3; and/or~~
 - (b) at least one polypeptide molecule comprising the amino acid sequence encoding Futrin 1, 2, 3 or 4 (SEQ ID NO. 26, SEQ ID NO: 27, SEQ ID NO. 25, SEQ ID NO: 28, respectively) ~~as depicted in Figure 4 or 6a; and/or~~
 - (c) at least one nucleic acid molecule the complementary strand of which hybridizes to a nucleic acid molecule of (a) and which encodes a polypeptide with the biological activity of Futrin 1, 2, 3 or 4 (SEQ ID NO. 21, SEQ ID NO: 22, SEQ ID NO. 20, SEQ ID NO: 23, respectively); ~~and/or~~
 - (d) at least one fragment of (a), (b) or (c) encoding and having the amino acid sequence of Futrin 1, 2, 3 or 4 (SEQ ID NO. 26, SEQ ID NO: 27, SEQ ID NO. 25, SEQ ID NO: 28, respectively) the and biological activity of Futrin 1, 2, 3 or 4 (SEQ ID NO. 26, SEQ ID NO: 27, SEQ ID NO. 25, SEQ ID NO: 28, respectively);
 - (e) at least one nucleic acid molecule the sequence of which differs from the sequence of the nucleic acid molecule of (a), (c) or (d) due to the degeneracy of the genetic code, and/or
 - (f) at least one ligand which is capable of specifically binding to the molecule of (a), (b), (c), (d) or (e).
2. (Previously presented) The diagnostic composition of claim 1, wherein the ligand is an antibody.
3. (Previously presented) The diagnostic composition of claim 1, wherein the nucleic acid molecule of part (d) has a length of at least 10 nucleotides.
4. (Currently amended) The diagnostic composition of claim 1 ~~or 2~~, wherein the ligand is detectably labeled.
5. (Previously presented) The diagnostic composition of claim 4, wherein the label is selected from the group consisting of a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, or an enzyme.

6. (Currently amended) The diagnostic composition of claim 1 ~~any one of claims 1 to 3~~, wherein the nucleic acid molecule, polypeptide or ligand are bound to a solid support.
7. (Currently amended) A method for diagnosing diseases related to aberrant expression of Futrin 1, 2, 3 and/or 4 and/or activity of the polypeptides, the method comprising:
using ~~Use of~~ a nucleic acid molecule, polypeptide and/or ligand according to claim 1 for the preparation of a diagnostic composition ~~as defined in any of claims 1 to 6 for the diagnosis of a disease associated with (a) aberrant expression of Futrin 1, 2, 3 and/or 4 and/or (b) aberrant activities or amounts of a Futrin 1, 2, 3 and/or 4 polypeptide.~~
8. (Currently amended) The method according to claim 7 ~~Use according to claim 7~~, wherein the target to which the nucleic acid molecule hybridizes is a mRNA.
9. (Currently amended) A method of diagnosing a disease associated with (a) aberrant expression of Futrin 1, 2, 3 and/or 4 (SEQ ID NO. 26, SEQ ID NO: 27, SEQ ID NO. 25, SEQ ID NO: 28, respectively) and/or (b) aberrant activities or amounts of a Futrin 1, 2, 3 and/or 4 polypeptide in a subject comprising:
(a) determining (a) the amount of expression of Futrin 1, 2, 3 and/or 4 and/or (b) the amount of biologically active Futrin 1, 2, 3 and/or 4 polypeptide in a biological sample; and
(b) diagnosing a disease associated with (a) aberrant expression of Futrin 1, 2, 3 and/or 4 and/or (b) aberrant activities or amounts of a Futrin 1, 2, 3 and/or 4 polypeptide or a risk for the development of such disease based on an altered amount of expression of Futrin 1, 2, 3 and/or 4 and/or (b) an altered amount of biologically active Futrin 1, 2, 3 and/or 4 polypeptide compared to a control.
10. (Currently amended) A method for identifying a binding partner to a Futrin 1, 2, 3 and/or 4 (SEQ ID NO. 26, SEQ ID NO: 27, SEQ ID NO. 25, SEQ ID NO: 28, respectively) polypeptide comprising:
(a) contacting said polypeptide with a compound to be screened; and
(b) determining whether the compound effects an activity of said polypeptide or whether binding of the compound to said polypeptide has occurred.
11. (Currently amended) A method for identifying activators/agonists or inhibitors/antagonists of a Futrin 1, 2, 3 and/or 4 polypeptide (SEQ ID NO. 26, SEQ ID NO: 27, SEQ ID NO. 25, SEQ ID NO: 28, respectively) comprising the steps of:
(a) incubating a candidate compound with said polypeptide;

- (b) assaying a biological activity, and
- (c) determining if a biological activity of said polypeptide has been altered.

12. (Currently amended) A method of identifying and obtaining a drug candidate for therapy of a disease associated with (a) aberrant expression of the gene encoding Futrin 1, 2, 3 and/or 4 (SEQ ID NO. 21, SEQ ID NO: 22, SEQ ID NO. 20, SEQ ID NO: 23, respectively) and/or (b) aberrant activities or amounts of Futrin 1, 2, 3 and/or 4 (SEQ ID NO. 26, SEQ ID NO: 27, SEQ ID NO. 25, SEQ ID NO: 28, respectively) comprising the steps of

- (a) contacting a Futrin 1, 2, 3 and/or 4 polypeptide or a cell expressing said polypeptide, and optionally the corresponding ligand(s), in the presence of components capable of providing a detectable signal in response to binding to said drug candidate to be screened; and
- (b) detecting presence or absence of a signal or increase of the signal generated, wherein the presence or increase of the signal is indicative for a putative drug.

13. (Currently amended) An activator/agonist or inhibitor/antagonist of a Futrin 1, 2, 3 and/or 4 polypeptide (SEQ ID NO. 26, SEQ ID NO: 27, SEQ ID NO. 25, SEQ ID NO: 28, respectively) or binding partner of said polypeptide(s) obtainable by the method of claim 11. ~~any one of claims 10 to 12.~~

14. (Currently amended) A pharmaceutical composition comprising a compound which is capable of modulating the expression of a gene encoding futrin 1, 2, 3 and/or 4 (SEQ ID NO. 21, SEQ ID NO: 22, SEQ ID NO. 20, SEQ ID NO: 23, respectively) or the activity of Futrin 1, 2, 3 and/or 4 (SEQ ID NO. 26, SEQ ID NO: 27, SEQ ID NO. 25, SEQ ID NO: 28, respectively) and a pharmaceutically acceptable excipient, diluent or carrier.

15. (Currently amended) The pharmaceutical composition of claim 14, wherein the compound stimulates expression of the gene encoding Futrin 1, 2, 3 and/or 4 (SEQ ID NO. 21, SEQ ID NO: 22, SEQ ID NO. 20, SEQ ID NO: 23, respectively) or the activity of Futrin 1, 2, 3 and/or 4 polypeptide (SEQ ID NO. 26, SEQ ID NO: 27, SEQ ID NO. 25, SEQ ID NO: 28, respectively).

16. (Currently amended) The pharmaceutical composition of claim 15, wherein the compound is a nucleotide molecule encoding a polypeptide having a biological activity of Futrin 1, 2, 3 and/or 4, a Futrin 1, 2, 3 and/or 4 polypeptide, an activator/agonist or inhibitor/antagonist of a Futrin 1, 2, 3 and/or 4 polypeptide or binding partner of said polypeptide(s) obtainable by the method of claim 12 ~~any one of claims 10 to 12.~~

17. (Currently amended) ~~Use of a compound as defined in claim 16 for the~~ A method of preparation of a pharmaceutical composition for the treatment of a disease associated with (a) aberrant expression of Futrin 1, 2, 3 and/or 4 and/or a gene involved into the *wnt* signal cascade and/or (b) aberrant activities or amounts of a Futrin 1, 2, 3 and/or 4 and/or polypeptide involved into the Wnt signal cascade comprising using a compound of claim 16.

18. (Currently amended) ~~The method of claim Use according to claim 7 or 17,~~ wherein the disease is a tumor or a disease of the kidneys, muscle, bones and eyes.

19. (Currently amended) A method of preparing a pharmaceutical composition for activating or inhibiting the Wnt signal cascade, the method comprising:

~~Use of using~~ a nucleotide molecule encoding a polypeptide having a biological activity of Futrin 1, 2, 3 and/or 4, a Futrin 1, 2, 3 and/or 4 polypeptide, an activator/agonist of a Futrin 1, 2, 3 and/or 4 polypeptide or binding partner of said polypeptide(s) for the preparation of ~~a~~ the pharmaceutical composition for activating or inhibiting the Wnt signal cascade.

20. (Currently amended) The method of claim 19 for preparation of a composition for ~~Use according to claim 19 for~~ supporting regenerative processes.